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PPG INDUSTRIES INC			SERGENT, RABON A		
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DITTSRUDGH PA 15272			1711		•

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Please find below and/or attached an Office communication concerning this application or proceeding.

# UNITED STATES PATENT AND TRADEMARK OFFICE



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# BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 09/695,332 Filing Date: October 25, 2000

Appellant(s): OKOROAFOR ET AL.

Carol A. Marmo For Appellant

**EXAMINER'S ANSWER** 

MAILED

DEC 2 0 2005

**GROUP 1700** 

This is in response to the appeal brief filed October 7, 2005 appealing from the Office action mailed January 25, 2005.

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# (1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

#### (2) Related Appeals and Interferences

The following are the related appeals, interferences, and judicial proceedings known to the examiner which may be related to, directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal:

An appeal has been simultaneously filed in U.S. application 09/695,325.

#### (3) Status of Claims

The statement of the status of claims contained in the brief is correct.

#### (4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

# (5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

# (6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

#### (7) Claims Appendix

A substantially correct copy of appealed claims 15, 50, and 82 appear on pages 10, 11, 21, 29, and 30 of the Appendix to the appellant's brief. The minor errors are as follows: With respect to claim 15, on page 11 of the Appendix, the text, "a diamine represented by the general formula (B):", should appear before structure (B) at the top of the page. With respect to claim 50, the claim has been identified as "currently amended" and underlined text appears in the

claim, however, the claim has not been amended from the claim, filed April 4, 2005; therefore, despite the incorrect identifier, the text of the claim is proper and corresponds to the appealed claim. With respect to claim 82, one page 30, the text, "diamine of general formula (A) is selected from one or more of the group consisting of:", appearing within the third line from the end of the claim, should appear on page 29 immediately after the text of line 1 of the claim.

#### (8) Evidence Relied Upon

Kroschwitz, Jacqueline I., Editor, Concise Encyclopedia of Polymer Science and Engineering; John Wiley & Sons; New York; 1990; pp. 295-297.

Grant, Roger, Grant & Hackh's Chemical Dictionary, Fifth Edition, McGraw-Hill Book Company, New York, 1987, p. 201.

Webster's II New Riverside University Dictionary; The Riverside Publishing Company; 1984; p. 421.

#### (9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1-119 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Appellants have failed to provide support for claiming that the polymerizate is nonelastomeric. The examiner has reviewed the specification and finds no support for the amendments to independent claims 1, 35, and 69, requiring the polymerizate to be nonArt Unit: 1711

elastomeric. In fact, the examiner cannot find mention within the specification of the term, "nonelastomeric" or "elastomeric". Furthermore, it follows that appellants have failed to adequately define what is meant by "non-elastomeric" and have failed to delineate how or what properties are governed by the language. It is noted that appellants have disclosed at page 22, line 13 that flexibilizing additives may be incorporated within the composition; therefore, it is logical to conclude that appellants envisioned the compositions having a degree of flexibility or elasticity, which is contrary to the concept of the composition being "non-elastomeric". This position serves to reinforce the position that the meaning of appellants' amended language is unclear, since "non-elastomeric" excludes all elastomeric properties, such as flexibility or elasticity. It is noted that appellants amended their claims to require the polymerizate to be non-elastomeric, so as to distinguish their claims from the elastomers disclosed within the previously applied Cassidy et al. reference (U.S. Patent 4,866,103). Therefore, since appellants are depending on this sole term to distinguish the instant invention from the prior art, it stands to reason that the term must have clear support and that the definition of the term, as it applies to the instant composition, must be clear. In the instant case, neither requirement is met.

Appellants have argued that the term, "non-elastomeric", has an ordinary meaning, and that the term, "non-elastomeric", would be clearly understood by one having ordinary skill in the art. Specifically, appellants argue that the term, "non-elastomeric", would be understood to be defined as polymers that do not have the ability to be stretched to at least twice their original length and are unable to retract very rapidly to approximately their original length when released. In response, no well founded reason has been set forth to support the position that the undisclosed and unsupported term would be understood as argued or as narrowly defined as

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argued. For example, the definitions of elastomer within Grant & Hackh's Chemical Dictionary, Fifth Edition; Webster's II New Riverside University Dictionary; and the Concise Encyclopedia of Polymer Science and Engineering differ from each other and from appellants' argued definition. Given these differing definitions, it cannot be determined how the language should ultimately be defined or what definition is controlling. Furthermore, it is by no means clear that a definition of "elastomeric" provides adequate definition for "non-elastomeric". Accordingly, the position is maintained that one of ordinary skill in the art could not reasonably determine what properties or characteristics, such as degree of elasticity, are encompassed or excluded by the language.

Furthermore, regardless of the definition of the term, "non-elastomeric", the position is maintained that the specification, as originally filed, fails to support the term. Appellants have referred to disclosed properties, such as hardness and impact resistance, and applications; however, no clear nexus has been established between these properties or applications and "non-elastomeric". Appellants have not established that the argued properties and applications are clearly indicative of and supportive of the polymerizate being "non-elastomeric". Accordingly, these terms and disclosures do not provide support for the language.

Claims 1-119 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

All polythiourethanes have some degree of flexibility or elasticity; however, appellants have failed to provide enablement for the production of polythiourethanes lacking all elastomeric

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properties or having properties associated with the condition of being "non-elastomeric". Given the lack of disclosure with respect to either adequate definition of "non-elastomeric" or the physical properties associated with "non-elastomeric", the position is taken that one skilled in the art could not produce "non-elastomeric" polyurethanes based upon the original disclosure without having to resort to undue experimentation. *In re Wands*, 858 F.2d 731, 737, 8 USPQ2d 1400, 1404 (Fed. Cir. 1988). By teaching that flexibilizing additives may be utilized within the composition at page 22 of the specification, appellants have in fact taught how to enhance elastomeric properties, rather than eliminate them.

Appellants have argued that the specification includes a detailed disclosure of the various materials used in preparing the composition, the means of polymerizing the composition, and the characteristics of the resultant polymerizate; therefore, the skilled artisan could practice the invention without undue experimentation. In response, appellants' arguments are relevant only for the application as originally filed, the argument does not address the claims, as amended, requiring the polymerizate to be "non-elastomeric". It stands to reason that if one cannot determine exactly what characteristics or properties are mandated by the term, "non-elastomeric", then one cannot tailor a composition that satisfies the requirement that the composition be "non-elastomeric". Appellants have argued that the term, "elastomer", has an ordinary and specific meaning within the art; therefore, the term, "non-elastomeric", has an ordinary and specific meaning. Firstly, it is by no means clear that the definition of one term clearly defines the other. Secondly, there is nothing within the record that requires the terminology to be as narrowly defined as argued by appellants. As aforementioned, the examiner has provided three other definitions of "elastomer" that are not as limited as appellants'

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definition. Therefore, one cannot determine which definition is relevant and what specific

properties are mandated by "non-elastomeric". Since one skilled in the art could not determine

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what properties or characteristics are required by the "non-elastomeric" language, one could not

produce a composition that satisfies the requirement; therefore, adequate enablement is not

present.

(10) Response to Argument

Appellants' arguments have been addressed within the Grounds of Rejection.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related

Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

RABON SERGENT

PRIMARY EXAMINER

R. Sergent

December 4, 2005

Conferees:

James Saiderk

Pat Ryan